

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

REMARKS

I. Introduction

Claims 1-6, 13, 15-18 and 26 have been examined and are rejected. Specifically, claims 1-6 and 26 stand rejected under 35 U.S.C. § 112, second paragraph. Additionally, claims 1, 5, 6 and 16 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Yamada et al., U.S. Patent No. 5,838,354 (hereinafter "Yamada"). Claims 13, 18 and 26 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Orbons et al., EP 0 727 375 (hereinafter "Orbons").

Furthermore, claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamada in view of Orbons. Claims 13 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over McCulley, U.S. Patent No. 938,885 (hereinafter "McCulley") in view of Smedal, U.S. Patent No. 1,128,730 (hereinafter "Smedal"). Claim 15 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hageman, U.S. Patent No. 2,300,276 (hereinafter "Hageman") in view of Metzner, U.S. Patent No. 2,904,332 (hereinafter "Metzner").

Further still, although claims 3 and 4 are rejected under § 112, second paragraph, the Examiner acknowledges that claims 3 and 4 contain allowable subject matter (*see* Office Action, page 6).

By way of overview, Applicant overcomes the § 112, second paragraph, rejections of claims 1-6 and 26; overcomes the art rejections of claims 1-2, 5-6, 15-16 and 26; and traverses the art rejections of claims 13 and 17-18, as follows.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

II. Allowable Subject Matter

The Examiner acknowledges that claims 3 and 4 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph and to include all of the limitations of claim 1. Applicant overcomes the § 112, second paragraph, rejections of claims 3 and 4 for at least the reasons set forth below. However, because claim 1 is allowable over the applied art for at least the reasons set forth below, Applicant withholds rewriting claims 3 and 4 in independent form at this time.

III. Claim Rejections -- 35 U.S.C. § 112, Second Paragraph

Claims 1-6 and 26 stand rejected under § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner alleges that "a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired" (*see* Office Action, page 2). According to the Examiner, in the present instance, claims 1 and 26 recite the broad recitation "substantially flat sheet of paper", and the claims also recite "including a stiff carton" which is the narrower statement of the range/limitation.

Applicant amends claims 1 and 26 (*see also* claim 15) to further clarify the distinctions between a roll of paper, a flat sheet of paper and a stiff carton. Applicant respectfully submits that these amendments overcome the § 112, second paragraph, rejections of independent claims 1 and 26, as well as claims 2-6 by virtue of their dependency.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

IV. Claim Rejections -- 35 U.S.C. § 102(e) and § 102(b)

Claims 1, 5-6 and 16

Claims 1, 5-6 and 16 stand rejected under § 102(e) as allegedly being anticipated by Yamada.

A. *Claims 1 and 5-6*

Claim 1 recites, *inter alia*, "a paper feeding unit . . . located at a height that enables a user standing in front of the printer to execute the paper feeding process including replacement of the roll paper and setting the sheet of paper". Thus, claim 1 requires not only a large printer with a paper feeding unit, but that the paper feeding unit be located at a height that enables a user standing in front of the printer to execute the paper feeding process.

Applicant respectfully submits that these recited features expressly contradict the Examiner's position that claim 1 reads on any height (*see* Office Action, page 6). For example, a paper feeding unit located at a height such that a user has to kneel or sit, as opposed to standing, in order to execute a paper feeding process, would represent a height that does not read on claim 1.

Contrary to the Examiner's continued allegation that Yamada discloses these features of claim 1, for example, in Fig. 29 (*see* Office Action, page 3), Yamada merely illustrates the outer appearance of an image forming apparatus. Yamada fails to disclose or suggest any relationship between a located height of a paper feeding unit and a user standing in front of the printer. Indeed, the static image conveyed by Fig. 29 of Yamada does not include an illustrated user therein for reference (*c.f.*, Applicant's Fig. 1).

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

Furthermore, the Examiner continues to allege that Yamada discloses "a paper feeding unit operable to feed at least one roll of paper, at least one substantially flat sheet of paper and a stiff carton", as recited in claim 1. Applicant respectfully submits that the Examiner's allegation that a roll of paper is merely a long sheet packaged in a certain manner (*see* Office Action, page 6) is irrelevant.

Claim 1 requires that a large printer have a paper feeding unit capable of feeding a roll of paper, a substantially flat sheet of paper and a stiff carton. Even assuming, *arguendo*, that the Examiner's characterization of a roll of paper is accurate, it does not follow that a paper feeding unit capable of feeding paper packaged in one manner, *e.g.*, on a roll, would be capable of feeding paper packaged in another manner, *e.g.*, as a substantially flat sheet or a stiff carton.

Indeed, Yamada describes a paper feed station 1 that can accommodate a plurality of roll sheets such as roll sheets 101, 102 and 103 (Yamada: Fig. 2; col. 6, lines 34-37).

Notwithstanding the Examiner's conclusory characterization that a roll of paper is merely a long sheet packaged in a certain manner (*see* Office Action, page 6), Yamada fails to disclose or suggest that the paper feed station 1 is capable of feeding anything other than a roll of paper, let alone the recited sheet of paper and stiff carton.

For at least the above exemplary reasons, claim 1 is not anticipated by Yamada. Consequently, claims 5 and 6 are not anticipated by Yamada, at least by virtue of their dependency.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

B. Claim 16

Claim 16 recites, *inter alia*, "a sheet feeding area positioned at a height at which a user standing in front of the printer can set up a printing medium without having to bend substantially at the waist". Thus, claim 16 is not anticipated by Yamada based on a rationale similar to that set forth above for claim 1. Additionally, Applicant amends claim 16 to recite that the large printer comprises "a pair of support members for supporting both ends of the elongative member, at least one of the support members being pivotable toward the front of the printer". Yamada fails to disclose or suggest a support member that is pivotable toward the front of the printer. Therefore, claim 16 is further distinguished from the image forming apparatus of Yamada.

Claims 13, 18 and 26

Claims 13, 18 and 26 stand rejected under § 102(b) as allegedly being anticipated by Orbons.

A. Claim 13

The Examiner alleges that claim 13 is anticipated by Orbons. Applicant respectfully disagrees.

Claim 13 recites, *inter alia*, "a sheet feeding area positioned at a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level". The Examiner alleges that the recited "sheet feeding area" reads on any part of Orbons' Fig. 1 that feeds sheets (*see* Office Action, page 7).

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

To the contrary, Orbons makes a clear distinction between its processing unit 1 and its feed unit 2 (Orbons: Fig. 1). Indeed, Orbons expressly describes the feed unit 2 housing rolls of receiving material 16, 17, 18, 19 placed in drawers 14, 15 (Orbons: Abstract).

Furthermore, Orbons describes a channel 35, 36, 37, 48, 49 that is formed at a working height for a standing operator (Orbons: Abstract; and Fig. 1). This channel allows the standing user to place a roll of receiving material 16, 17, 18, 19 having a hollow core 30 in the channel so that a spindle 31 can be introduced into the roll core 30 (Orbons: Abstract). The feed unit 2 of Orbons is located below this channel and thus is below a working height for a standing operator (Orbons: Fig. 1).

Thus, contrary to the Examiner's allegation that setting up the spindle and loading rolls 16 and 17 anticipates the "sheet feeding area" of claim 13 (*see* Office Action, page 7), in Orbons, a standing operator would necessarily have to bend substantially, *i.e.*, non-negligibly, at the waist in order to load the rolls of receiving material 16, 17 into drawer 14 of the feed unit 2 (Orbons: Fig. 1). Indeed, Orbons expressly discloses that the user must bend in order to introduce the rolls 16, 17 into the drawer 14 (Orbons: col. 5, lines 2-7; Fig. 1).

For at least these exemplary reasons, claim 13 is not anticipated by Orbons.

B. Claim 18

Like claim 13, claim 18 recites "a sheet feeding area positioned at a height at which a user standing in front of the printer can set up a printing medium without having to bend substantially at the waist, wherein the sheet feeding area is positioned at the height when the

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

printer is placed substantially at ground level". Thus, claim 18 is not anticipated by Orbons based on a rationale similar to that set forth above for claim 13.

Additionally, claim 18 also recites, *inter alia*, "a paper feeding path which extends straight in a vertical direction from the paper feeding area to the paper discharge area via the printing area". The Examiner alleges that paths 22, 23 and 9 of Orbons disclose the recited paper feeding path of claim 18 (*see* Office Action, page 7). Applicant respectfully disagrees.

For example, element 9 of Orbons is a heating device and not a path (Orbons: col. 2, lines 37-39). With respect to the paths formed by the common conveyors 22 and 23 of Orbons, these paths feed the receiving material from the feed unit 2 to the processing unit 1 (Orbons: col. 3, lines 1-2). However, neither common conveyor 22 nor 23 discloses or suggests a path extending straight in a vertical direction from the feed unit 2 of Orbons to a discharge area or Orbons. Instead, Orbons describes a separate discharge path 10, which is not straight in a vertical direction and does not correspond to the recited paper feeding path (Orbons: col. 2, lines 39-40; and Fig. 1).

For at least these exemplary reasons, claim 18 is not anticipated by Orbons.

C. Claim 26

The Examiner alleges that claim 26 is anticipated by Orbons. As noted above, claim 26 is amended to recite "a sheet feeding area operable to feed a plurality of paper rolls ranging in width from 210 mm to 1120 mm, a substantially flat sheet of paper ranging in length from 420 mm to 1580 mm and a stiff carton ranging in length from 420 mm to 730 mm".

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

Orbons fails to disclose or suggest a sheet feeding area operable to feed a plurality of paper rolls of the recited dimensions (widths), a substantially flat sheet of paper of the recited dimensions (lengths) and a stiff carton of the recited dimensions (lengths). Consequently, claim 26 is not anticipated by Orbons.

V. Claim Rejections -- 35 U.S.C. § 103(a)

Claim 2

Claim 2 stands rejected under § 103(a) as allegedly being unpatentable over Yamada in view of Orbons.

Claim 2 depends from claim 1. Since Orbons fails to make up for the deficiencies of Yamada described above with respect to claim 1, claim 2 is patentable over a reasonable combination of Yamada and Orbons, if any, at least by virtue of its dependency.

Claims 13 and 17

Claims 13 and 17 stand rejected under § 103(a) as allegedly being unpatentable over McCulley in view of Smedal.

The Examiner maintains the rejection of claims 13 and 17. Applicant respectfully submits that claims 13 and 17 are patentable over McCulley and Smedal for at least the exemplary reasons set forth in Applicant's Amendments of February 25, 2003 and July 8, 2003, and the Examiner is respectfully requested to reconsider his position.

Applicant disagrees with the Examiner's characterization that Applicant's non-analogous art arguments merely represent an assertion that a typewriter is not a printer. A reasonable interpretation of the claims must be consistent with the interpretation that those skilled in the art

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

would reach (MPEP § 2111). The title of Applicant's invention is *Large Printer*. Furthermore, all of the pending claims are directed to large printers (*see, e.g.*, claims 13 and 17). Typewriters are not large printers.

Indeed, as noted in Applicant's Amendment of February 25, 2003, typewriters do not generally suffer from the problems encountered by large printers. By way of example and not by way of limitation, typewriters would not require a deeper installation space for replacing a paper roll or require that a user replace a heavy roll of paper (*see, e.g.*, Applicant's page 1, line 1 to page 2, line 19). Indeed, Applicant's specification clearly describes the aforementioned exemplary problems encountered by large printers (*see, e.g.*, Applicant's Specification at page 1, lines 5-7; page 1, lines 8-12; page 1, line 25 to page 2, line 5; page 2, lines 12-19; page 2, line 23 to page 3, line 5; and Figs. 1 and 4).

Therefore, to the extent that McCulley and/or Smedal represent non-analogous art, the rejection of claims 13 and 17 under § 103(a) is improper.

In view of the above, a reasonable combination of McCulley and Smedal, if any, would not render the subject matter of claim 13 obvious. Consequently, claim 17 is patentable over McCulley and Smedal as well, at least by virtue of its dependency.

Claim 15

Claim 15 stands rejected under § 103(a) as allegedly being unpatentable over Hageman in view of Metzner.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

Applicant amends claim 15 to recite "a cover member, which covers a first feeding path for the roll of paper from above, and which supports at least one of the sheet of paper and the stiff carton from below to constitute a part of a second feeding path for the sheet of paper".

The Examiner continues to allege that Hageman discloses a cover member that covers a feeding path and that Metzner discloses a structure that covers a sheet (*see* Office Action, page 8). In particular, the Examiner's position is that housing 45 and guide plate 42 of Hageman, as well as guide member 23 of Metzner, render the cover member of claim 15 obvious. Applicant disagrees.

The Examiner maintains the rejection of claim 15. Applicant respectfully submits that claim 15 is patentable over Hageman and Metzner for at least the exemplary reasons set forth in Applicant's Amendments of February 25, 2003 and July 8, 2003, and the Examiner is respectfully requested to reconsider his position.

For example, Hageman and Metzner, either alone or in combination, fail to teach or suggest the features of "a sheet feeding area operable to feed at least one roll of paper, at least one sheet of paper and a stiff carton toward a printing unit at which printing is performed thereon", as recited in claim 15.

For example and not by way of limitation, Metzner fails to teach or suggest that "the cover member extends linearly from an upstream portion thereof to a downstream portion thereof in connection with a direction in which the sheet of paper is fed at the sheet feeding area", as recited in claim 15. In Metzner, the deflector guides 22 and 23 are guide members for

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

discharging used record strip elements R and carbon strip elements C from the printing unit, *i.e.*, away from the recording machine 11.

Thus, for at least the above exemplary reasons, a reasonable combination of Hageman and Metzner, if any, would not render claim 15 obvious.

VI. New Claim 31

Applicant adds new claim 31 in order to obtain an expanded scope of protection. Claim 31 recites that "the flat sheet of paper has a thickness of less than 0.5 mm and the stiff carton has a thickness ranging from 0.5 mm to 1.5 mm".

VII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

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